

texas_merge_postmeeting

Teo Richard

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Setup

Read in datasets (old, new, street names)

Make all NA dates in `old$date_open` be 1993-01-01

Normalizer

```
replacees1 = c('north', 'east', 'west', 'south') # replacing these values with n, e, s, w, s
replacers1 = c('n', 'e', 'w', 's')

# replacing these values (full street names) with nothing
replacees2 = str_to_lower(c(street_names_abbs[[1]],
                           street_names_abbs[[2]], "and", "temporarily closed"))

replacers2 = rep('', length(replacees2))

replacees = append(replacees1, replacees2)
replacers = append(replacers1, replacers2)

replacement = setNames(replacers, replacees) # named vector: values come from replacers, names come from replacees

# general sort function
sorted = function(col) {

  formatted = str_to_lower(col)
  formatted = str_replace_all(formatted, replacement) # replacing all `replacees` with `replacers`
  formatted = str_replace_all(formatted, "\\b[A-Za-z]\\b", '')
  formatted = str_replace_all(formatted, setNames(c('', ''), c('[:punct:]', ' '))) # replacing punctuation with space

  # for each element x in f_addr, splits into each character and sorts them, then collapses them; the e
  formatted_sorted <- as.character(sapply(formatted, function(x) {
    sorted_chars <- stri_sort(strsplit(x, NULL)[[1]])
    paste(sorted_chars, collapse = '')
  })))

  return(formatted_sorted)
}

# name normalizer
```

```
sorted_names = function(col) {
  # getting all clinics that are different but have the same name
  f_name_remove = c('remote', 'wic', 'field', 'office', 'mobile', 'clinic', ' ', '-')
  f_name_pattern = paste(f_name_remove, collapse = '|')
  f_name = str_replace_all(col, f_name_pattern, '')
  f_name = sorted(f_name)
  return(f_name)
}
```

Reformats

Add siteid column to old

turn everything lowercase

```
# old = old %>% mutate(date_open = ifelse(is.na(date_open), 'In 2009 but NA', date_open))

# extracting site id from `new`
rev_new_siteid = str_replace(str_extract(new$name, '\\d*-\\d*'), '-', '')
rev_new_siteid = str_replace(rev_new_siteid, '0*', '')

rev_new_name = str_replace(new$name, '\\d*-\\d*\\s*', '')

# creating new siteid column
new = new %>%
  mutate(siteid = rev_new_siteid, .before = name,
         name = rev_new_name)

# making everything lowercase for easy matching
old = old %>% mutate(COUNTY = str_to_lower(COUNTY),
                    name = str_to_lower(name),
                    state = str_to_lower(state),
                    city = str_to_lower(city))

# making county_name formatted the same
new = new %>% mutate(county_name = str_to_lower(
  str_replace(county_name, '\\sCounty\\s*', '')),
  name = str_to_lower(name),
  state = str_to_lower(state),
  city = str_to_lower(city))
```

make f_addr and f_name

```
new = new %>%
  mutate(f_addr = sorted(.$street_address), .after = street_address) %>%
  mutate(f_name = sorted_names(.$name), .after = name)

old = old %>%
  mutate(f_addr = sorted(.$address), .after = address) %>%
  mutate(f_name = sorted_names(.$name), .after = name)

old = old %>%
  mutate(
    date_open = ymd(date_open),
```

```

    date_close = ymd(date_close)
  )

old = old %>%
  mutate(
    addr_zip_county = paste0(f_addr, "_", zip, "_", COUNTY),
    name_zip_county = paste0(f_name, "_", zip, "_", COUNTY),
    siteid_zip = paste0(siteid, "_", zip)
  )

new = new %>%
  mutate(
    addr_zip_county = paste0(f_addr, "_", zipcode, "_", county_name),
    name_zip_county = paste0(f_name, "_", zipcode, "_", county_name),
    siteid_zip = paste0(siteid, "_", zipcode)
  )

old = old %>%
  mutate(
    fixed_date_open = date_open
  )

```

fix the dates where both date_open and date_close are NA

```

old = old %>%
  mutate(
    fixed_date_open = case_when(
      is.na(date_open) & is.na(date_close) ~ as.Date("1993-01-01"),
      TRUE ~ fixed_date_open
    ),
    flag_both_dates_missing = is.na(date_open) & is.na(date_close)
  )

```

```

find_duplicates = function(clinic, all_clinics) {
  # flow: for a given clinic, find other clinics where either f_addr & zip matches or f_name & zip matches
  potential_dups = all_clinics %>%
    filter(
      siteid != clinic$siteid, # not itself
      addr_zip_county == clinic$addr_zip_county | name_zip_county == clinic$name_zip_county
    )

  return(potential_dups)
}

```

Find matches between new and old based on a key (siteid, name_zip_county, addr_zip_county)

```

find_matches = function(new_clinic, old_data, match_key) {
  if (match_key == "siteid_zip") {
    matches = old_data %>% filter(siteid_zip == new_clinic$siteid_zip)
  } else if (match_key == "name_zip_county") {
    matches = old_data %>% filter(name_zip_county == new_clinic$name_zip_county)
  } else if (match_key == "addr_zip_county") {
    matches = old_data %>% filter(addr_zip_county == new_clinic$addr_zip_county)
  } else {

```

```

    stop("Invalid match_key")
  }

  return(matches)
}

# Check if duplicates reopened within 31 days
check_reopening_31_days <- function(matches) {
  if (nrow(matches) < 2) return(FALSE)

  matches <- matches %>%
    arrange(date_open) # sort by date_open

  reopen_diffs <- difftime(matches$date_open[-1], matches$date_close[-nrow(matches)], units = "days")

  any(reopen_diffs >= 0 & reopen_diffs <= 31, na.rm = TRUE)
}

reopened_within_31_days = function(clinic, potential_dups) {
  # Flow: for this one clinic `clinic`, find all potential duplicates and check if any of them reopened w
  if (nrow(potential_dups) == 0) {
    return(FALSE)
  }

  # takes the duplicates and calculates the amount of time between their date_open and the closure date o
  potential_dups = potential_dups %>%
    mutate(days_diff = as.numeric(difftime(date_open, clinic$date_close, units = "days")))

  # returns TRUE if any clinic's opening date was within 31 days of clinic i's closure date.
  any(potential_dups$days_diff >= 0 & potential_dups$days_diff <= 31, na.rm = TRUE)
}

# na_open_present_close = old %>%
#   filter(is.na(date_open) & !is.na(date_close))
#
#
# old = old %>%
#   mutate(
#     flag_open_na_close_present = FALSE,
#     flag_duplicate_found = FALSE,
#     flag_reopened_within_31 = FALSE
#   )
#
#
# for (i in 1:nrow(na_open_present_close)) {
#   clinic = na_open_present_close[i, ]
#
#
#   dups = find_duplicates(clinic, old)

```

```

#
#
#   old_idx = which(old$siteid == clinic$siteid)
#
#
#   old$flag_open_na_close_present[old_idx] = TRUE
#
#
#   old$flag_duplicate_found[old_idx] = nrow(dups) > 0
#
#
#   if (nrow(dups) > 0) {
#
#       reopened = reopened_within_31_days(clinic, dups)
#
#
#       old$flag_reopened_within_31[old_idx] = reopened
#
#
#       if (reopened) {
#
#           old$fixed_date_open[old_idx] = as.Date("1993-01-01")
#       } else {
#           dup_min_open = min(dups$date_open, na.rm = TRUE)
#
#           if (!is.na(dup_min_open) && clinic$date_close <= dup_min_open) {
#
#               old$fixed_date_open[old_idx] = as.Date("1993-01-01")
#           }
#       }
#   } else {
#
#       old$fixed_date_open[old_idx] = as.Date("1993-01-01")
#   }
# }

```

1. Initialize flag columns (run BEFORE the loop)

```

old = old %>%
  mutate(
    flag_open_na_close_present = FALSE,
    flag_duplicate_found = FALSE,
    flag_reopened_within_31 = FALSE
  )

```

2. Filter target clinics

```

na_open_present_close = old %>%
  filter(is.na(date_open) & !is.na(date_close))

```

3. Loop through each such clinic

```

for (i in 1:nrow(na_open_present_close)) {
  clinic = na_open_present_close[i, ]
  dups = find_duplicates(clinic, old)
  old_idx = which(old$siteid == clinic$siteid)
}

```

```

# Flag basic condition
old$flag_open_na_close_present[old_idx] = TRUE
old$flag_duplicate_found[old_idx] = nrow(dups) > 0

if (nrow(dups) > 0) {
  # Check if any duplicate reopened within 31 days
  reopened = reopened_within_31_days(clinic, dups)
  old$flag_reopened_within_31[old_idx] = reopened

  # Check if any duplicate opened before this clinic closed
  opened_before_close = any(!is.na(dups$date_open) & dups$date_open < clinic$date_close)

  if (reopened && !opened_before_close) {
    # Case 1: Reopened quickly, and no earlier clinics - assume this is the original
    old$fixed_date_open[old_idx] = as.Date("1993-01-01")
  } else if (!reopened) {
    # Case 2: Not reopened - check for earliest known opening
    if (all(is.na(dups$date_open))) {
      # No known openings - assume this came first
      old$fixed_date_open[old_idx] = as.Date("1993-01-01")
    } else {
      dup_min_open = min(dups$date_open, na.rm = TRUE)
      if (clinic$date_close <= dup_min_open) {
        # Clinic closed before any other opened
        old$fixed_date_open[old_idx] = as.Date("1993-01-01")
      }
    }
  } else {
    # Case 3: No duplicates - assume this is the first known clinic
    old$fixed_date_open[old_idx] = as.Date("1993-01-01")
  }
}

# Find clinics in old where date_open is not NA but date_close is NA
open_present_close_na = old %>%
  filter(!is.na(date_open) & is.na(date_close))

# More flags
old = old %>%
  mutate(
    flag_open_present_close_na = FALSE,
    flag_open_present_close_na_duplicate_found = FALSE,
    flag_duplicate_came_first = NA,
    flag_fixed_due_to_earlier_duplicate = FALSE
  )

# Loop again through each clinic in open_present_close_na
for (i in 1:nrow(open_present_close_na)) {
  clinic = open_present_close_na[i, ]

  # Find potential duplicates for this clinic
  dups = find_duplicates(clinic, old)
}

```

```

# Get this clinic's index in old
old_idx = which(old$siteid == clinic$siteid)

old$flag_open_present_close_na[old_idx] = TRUE
old$flag_open_present_close_na_duplicate_found[old_idx] = nrow(dups) > 0

# If at least one duplicate is found
if (nrow(dups) > 0) {
  dups_with_earlier_open = dups %>%
    filter(
      # Filter duplicates with not NA date open and the date open is less than clinic i's date open
      (!is.na(date_open) & date_open < clinic$date_open) |
      # Filter duplicates with not NA date close and the date close is less than clinic i's date open
      (!is.na(date_close) & date_close < clinic$date_open)
    )

  earlier_than_open = nrow(dups_with_earlier_open) > 0
  old$flag_duplicate_came_first[old_idx] = earlier_than_open

  if (earlier_than_open) {
    # Filter duplicates that came before clinic i that have NA date open
    dups_needing_fix = dups_with_earlier_open %>%
      filter(is.na(date_open))

    if (nrow(dups_needing_fix) > 0) {
      old = old %>%
        mutate(
          # Change these date opens to 1993
          fixed_date_open = if_else(
            siteid %in% dups_needing_fix$siteid,
            as.Date("1993-01-01"),
            fixed_date_open
          ),
          flag_fixed_due_to_earlier_duplicate = if_else(
            siteid %in% dups_needing_fix$siteid,
            TRUE,
            flag_fixed_due_to_earlier_duplicate
          )
        )
    }
  }
}
}

old = old %>%
  mutate(fixed_date_open = as.Date(fixed_date_open))

match_new_to_old = function(new_data, old_data) {

  results = list()

  for (i in 1:nrow(new_data)) {
    new_clinic = new_data[i, ]

```

```

matched_by_id = FALSE
matched_by_name = FALSE
matched_by_addr = FALSE

matched_clinics = tibble()

# Check each matching method separately
matches_id = find_matches(new_clinic, old_data, "siteid_zip")
if (nrow(matches_id) > 0) {
  matched_by_id = TRUE
  matches_id = matches_id %>% mutate(match_method = "siteid_zip")
  matched_clinics = bind_rows(matched_clinics, matches_id)
}

matches_name = find_matches(new_clinic, old_data, "name_zip_county")
if (nrow(matches_name) > 0) {
  matched_by_name = TRUE
  matches_name = matches_name %>% mutate(match_method = "name_zip_county")
  matched_clinics = bind_rows(matched_clinics, matches_name)
}

matches_addr = find_matches(new_clinic, old_data, "addr_zip_county")
if (nrow(matches_addr) > 0) {
  matched_by_addr = TRUE
  matches_addr = matches_addr %>% mutate(match_method = "addr_zip_county")
  matched_clinics = bind_rows(matched_clinics, matches_addr)
}

if (nrow(matched_clinics) == 0) {
  results[[i]] = new_clinic %>%
    mutate(
      by_id = FALSE,
      by_name = FALSE,
      by_addr = FALSE,
      match_found = FALSE,
      flag_multiple_matches = FALSE,
      flag_missing_date = FALSE,
      flag_tie_open = FALSE,
      fixed_siteid = NA,
      fixed_date_open = NA,
      within_31_days = NA,
      max_date = NA
    )
} else {
  match_found = TRUE

  missing_date = any(is.na(matched_clinics$fixed_date_open))
  reopening_within_31 = check_reopening_31_days(matched_clinics)

  if (reopening_within_31) {
    within_31_days = TRUE
    earliest_date = min(matched_clinics$fixed_date_open, na.rm = TRUE)
    matches_earliest = matched_clinics %>% filter(fixed_date_open == earliest_date)
  }
}

```



```

    tie_open = nrow(matches_earliest) > 1
    fixed_siteid = paste(matches_earliest$siteid, collapse = ";")
    fixed_date_open = earliest_date
    flag_multiple_matches = tie_open
    max_date = FALSE
  } else {
    within_31_days = FALSE
    fixed_siteid = paste(matched_clinics$siteid, collapse = ";")

    valid_dates = matched_clinics %>% filter(!is.na(fixed_date_open))

    if (nrow(valid_dates) == 0) {
      max_date = NA
      fixed_date_open = NA
    } else if (any(matched_clinics$flag_reopened_within_31 == TRUE)) {
      t_reopen = matched_clinics %>% filter(flag_reopened_within_31 == TRUE)
      if (all(is.na(t_reopen$fixed_date_open))) {
        fixed_date_open = NA
      } else {
        fixed_date_open = min(t_reopen$fixed_date_open, na.rm = TRUE)
      }
      max_date = FALSE
    } else {
      max_date = TRUE
      fixed_date_open = max(valid_dates$fixed_date_open)
    }

    flag_multiple_matches = TRUE
    tie_open = NA
  }

  results[[i]] = new_clinic %>%
    mutate(
      by_id = matched_by_id,
      by_name = matched_by_name,
      by_addr = matched_by_addr,
      match_found = match_found,
      within_31_days = within_31_days,
      flag_multiple_matches = flag_multiple_matches,
      flag_missing_date = missing_date,
      flag_tie_open = tie_open,
      fixed_siteid = fixed_siteid,
      fixed_date_open = fixed_date_open,
      max_date = max_date
    )
}
}

final_results = bind_rows(results)
return(final_results)
}

matched_new = match_new_to_old(new, old)

```

```

vec_names = names(matched_new)[-c(3, 5, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22)]
matched_new = matched_new %>% select(all_of(vec_names), siteid_zip, name_zip_county, addr_zip_county, w

matched_new %>% filter(fixed_date_open == Inf)

## # A tibble: 0 x 21
## # i 21 variables: siteid <chr>, name <chr>, street_address <chr>, city <chr>,
## #   state <chr>, zipcode <chr>, county_name <chr>, by_id <lgl>, by_name <lgl>,
## #   by_addr <lgl>, match_found <lgl>, within_31_days <lgl>,
## #   flag_multiple_matches <lgl>, flag_missing_date <lgl>, flag_tie_open <lgl>,
## #   fixed_siteid <chr>, fixed_date_open <date>, max_date <lgl>,
## #   siteid_zip <chr>, name_zip_county <chr>, addr_zip_county <chr>
nrow(matched_new %>% filter(!is.na(fixed_date_open))) # Found 376 dates (now 373)

## [1] 373
nrow(matched_new %>% filter(is.na(fixed_date_open))) # Missing 89 dates (now 92)

## [1] 92
together = list()

NA_matched_new = matched_new %>% filter(is.na(fixed_date_open))
NA_matched_new_siteid = NA_matched_new %>% pull(siteid)

NA_matched_new_in_old = old %>% filter(siteid %in% NA_matched_new_siteid)
nrow(NA_matched_new_in_old) # 33

## [1] 35
for (i in 1:nrow(NA_matched_new_in_old)) {
  clinic = NA_matched_new_in_old[i, ]
  id = clinic %>% pull(siteid)

  clinic_in_new = new %>% filter(siteid == id) %>% mutate(from = "new")
  clinic_in_old = old %>% filter(siteid == id) %>% mutate(from = "old")

  dups = find_duplicates(clinic, old) %>% mutate(from = "duplicate in old")

  together = bind_rows(together, bind_rows(clinic_in_new, clinic_in_old, dups))
}

together = together %>%
  mutate(zipcode = coalesce(zipcode, zip)) %>%
  select(siteid, name, f_name, f_addr, city, zipcode, fixed_date_open, date_close, from)

NA_with_old = NA_matched_new %>%
  left_join(NA_matched_new_in_old, by = c("siteid" = "siteid", "city" = "city"), suffix = c(".new", ".o

matched_fix = NA_with_old %>%
  filter(!is.na(fixed_date_open.old)) %>%
  select(siteid, fixed_date_open.old)

```

```

matched_new_it2 = matched_new %>%
  left_join(matched_fix, by = "siteid") %>%
  mutate(fixed_date_open = if_else(is.na(fixed_date_open) & !is.na(fixed_date_open.old), fixed_date_open.old,
    bad_zipcode = if_else(!is.na(fixed_date_open.old), TRUE, FALSE)) %>%
  select(-fixed_date_open.old)

nrow(matched_new_it2 %>% filter(is.na(fixed_date_open))) # Missing 61 dates (now 63)

## [1] 63
# checked the extra two and it's good (vidor clinics)

remaining = matched_new_it2 %>% filter(is.na(fixed_date_open)) %>% pull(siteid)
remaining_in_old = old %>% filter(siteid %in% remaining)

# There are 5 clinics in matched_new_it2 that exist in old as well.
nrow(remaining_in_old)

## [1] 6

remaining_ids = remaining_in_old %>% pull(siteid)
remaining_in_matched = matched_new_it2 %>% filter(siteid %in% remaining_ids)

check = bind_rows(remaining_in_matched, remaining_in_old) %>% arrange(siteid)

# I manually checked these 5 (now 6) clinics. They appear to have moved cities. Therefore, will remain

matched_finalized = matched_new_it2 %>% select(-c(flag_tie_open, fixed_siteid, flag_multiple_matches))

# Note that if bad_zipcode is TRUE then the previous fixed_date_open would've been NA

sam = read_csv("/Users/teorichard/Downloads/UCD Research/Texas_WIC_Research_Files/MergedMatchTeoSam.csv")

## Rows: 465 Columns: 26
## -- Column specification -----
## Delimiter: ","
## chr (10): name, address, city, phone, email, date_open, street_address, sta...
## dbl (7): siteid, zip, sample_date, BY_SITEID, BY_ADDRESS, BY_NAME, zipcode
## lgl (8): COUNTY, date_close, by_id, by_name, by_addr, match_found, flag_mi...
## date (1): fixed_date_open
##
## i Use `spec()` to retrieve the full column specification for this data.
## i Specify the column types or set `show_col_types = FALSE` to quiet this message.

sam = sam %>% mutate(siteid = as.character(siteid))

sam %>% select(siteid, name, address, zip, date_open, fixed_date_open) %>%
  filter(date_open != fixed_date_open)

## # A tibble: 21 x 6
##   siteid name address zip date_open fixed_date_open
##   <chr> <chr> <chr> <dbl> <chr> <date>
## 1 129 elgin 218 s ~ 78621 2009-02-- 1994-01-01
## 2 1217 mission ii 722 n ~ 78572 1994-05-- 1993-01-01
## 3 1218 mcallen ii 220 s ~ 78501 1995-04-- 1993-01-01

```

```
## 4 1224 pharr ii 300 w ~ 78577 1999-01-- 1993-01-01
## 5 1228 mobile unidos podemos 3105 w~ 78539 2002-06-- 1996-07-22
## 6 3001 city of port arthur health de~ 5860 9~ 77642 1993-01-- 1999-08-10
## 7 3908 daingerfield 1402 b~ 75638 2010-01-- 1996-12-01
## 8 3917 jefferson 1113 n~ 75657 1998-11-- 1993-01-01
## 9 3919 carthage 446 w ~ 75633 1998-11-- 1993-01-01
## 10 4808 southeast center 3737 r~ 77503 1996-08-- 1993-01-01
## # i 11 more rows
```

```
names(sam)
```

```
## [1] "siteid" "name" "address"
## [4] "city" "zip" "COUNTY"
## [7] "date_close" "sample_date" "phone"
## [10] "email" "BY_SITEID" "BY_ADDRESS"
## [13] "BY_NAME" "date_open" "street_address"
## [16] "state" "zipcode" "county_name"
## [19] "by_id" "by_name" "by_addr"
## [22] "match_found" "flag_missing_date" "fixed_date_open"
## [25] "bad_zipcode" "_merge"
```

```
left_join(sam, matched_finalized, by = "siteid", suffix = c("", ".y")) %>%
  mutate(fixed_date_open = fixed_date_open.y) %>%
  select(names(sam)) %>% select(siteid, name, street_address, zip, date_open, fixed_date_open)
```

```
## # A tibble: 465 x 6
##   siteid name street_address zip date_open fixed_date_open
##   <chr> <chr> <chr> <dbl> <chr> <date>
## 1 104 st johns community cen~ 7500 Blessing~ 78752 1993-01-- 1993-01-01
## 2 105 northwest 8701 Research~ 78758 1993-11-- 1993-11-15
## 3 107 montopolis neighborhoo~ 2901 Montopol~ 78741 1993-01-- 1993-01-01
## 4 109 far south 405 W Stassne~ 78745 1993-01-- 1993-01-01
## 5 112 dove springs 5811 Palo Bla~ 78744 1993-03-- 1993-03-15
## 6 114 manor 14008 Shadowg~ 78653 1993-01-- 1993-01-01
## 7 115 pflugerville 15822-B Footh~ 78660 1993-01-- 1993-01-01
## 8 121 del valle 3518 FM 973 78617 1993-01-- 1993-01-01
## 9 128 bastrop 605 Old Austi~ 78602 2009-02-- 2009-02-02
## 10 129 elgin 218 South Mai~ 78621 2009-02-- 1994-01-01
## # i 455 more rows
```

```
nomatch_NA = matched_finalized %>% filter(is.na(fixed_date_open))
```

```
manual_fixes = tibble(
  siteid = c("7717", "9003", "13126", "13195", "13306", "6411", "6902", "5110", "5111", "332",
    "4210", "13172", "13161", "11002", "13020", "13025", "13124", "13018", "13115",
    "13151", "13030", "13041", "3317"),
  fixed_date_open = as.Date(c("2006-10-01", "1994-10-01", "1993-09-01",
    "1998-01-01", "1993-01-01", "1997-02-03",
    "1993-01-01", "1993-01-01", "1995-04-04",
    "1993-01-01", "1993-01-01", "1998-01-15",
    "1993-01-01", "2005-10-01", "1994-05-01",
    "1994-05-01", "1993-09-01", "1994-10-05",
    "1993-01-01", "1995-05-03", "1996-10-01",
    "1996-01-01", "1995-02-01"))
))
```

```

) %>% mutate(
  manual_date_change = TRUE
)

leave_NA = tibble(
  siteid = c("3925", "742", "743", "13307", "6110", "13153", "13197",
    "13198", "2209", "7723", "2908", "2901", "4602", "1112",
    "6307", "13308", "13305", "6410", "8964", "5935", "5914",
    "8963", "5915", "1318", "1322", "1320", "8965", "8967",
    "4305", "13029", "13021", "13024", "13123", "13005", "13009",
    "13008", "13002", "13004", "13010", "13003"
  ),
  why_NA = c("city mismatch", "not found", "not found", "not found", "not found",
    "not found", "not found", "city mismatch", "not found", "not found",
    "county mismatch", "not found", "city mismatch", "not found",
    "FOUND, NA date", "not found", "not found", "not found", "not found",
    "not found", "not found", "not found", "not found", "not found",
    "not found", "not found", "city mismatch", "not found", "not found",
    "not found", "not found", "not found", "not found", "city mismatch",
    "not found", "not found", "not found", "not found", "not found",
    "not found"
  )
)

manual_bad_zip = tibble(
  siteid = c("6411", "7717", "9003", "332", "4210", "13018", "13030", "3317"),
  bad_zipcode = TRUE
)

manual_matched_finalized = left_join(matched_finalized, manual_fixes, by = "siteid", suffix = c("", ".y")) %>%
  mutate(fixed_date_open = coalesce(fixed_date_open, fixed_date_open.y)) %>%
  left_join(leave_NA, by = "siteid") %>%
  left_join(manual_bad_zip, by = "siteid", suffix = c("", ".y")) %>%
  mutate(bad_zipcode = case_when(
    bad_zipcode == FALSE & bad_zipcode.y == TRUE ~ TRUE,
    bad_zipcode == TRUE & is.na(bad_zipcode.y) ~ TRUE,
    TRUE ~ FALSE
  )) %>%
  select(all_of(names(matched_finalized)), manual_date_change, why_NA)

manual_matched_finalized %>% filter(is.na(fixed_date_open))

```

```

## # A tibble: 40 x 21
##   siteid name      street_address city state zipcode county_name by_id by_name
##   <chr> <chr>      <chr>          <chr> <chr> <chr> <chr>      <lgl> <lgl>
## 1 3925 gun barr~ 1901 W Main St gun ~ tx 75156 henderson FALSE FALSE
## 2 742 fruitdal~ 4408 Vandervo~ dall~ tx 75216 dallas FALSE FALSE
## 3 743 healing ~ 5750 Pineland~ dall~ tx 75231 dallas FALSE FALSE
## 4 13307 buffalo ~ 942 North Hil~ buff~ tx 75831 leon FALSE FALSE
## 5 6110 kirbyvil~ 204 MLK Ave kirb~ tx 75956 newton FALSE FALSE
## 6 13153 nocona w~ Community Cen~ noco~ tx 76255 montague FALSE FALSE
## 7 13197 comanche~ 209 W Duncan ~ coma~ tx 76442 comanche FALSE FALSE
## 8 13198 de leon ~ Old Hotel Apa~ de l~ tx 76444 comanche FALSE FALSE
## 9 2209 south 18~ 1800 Gurley Ln waco tx 76706 mclennan FALSE FALSE

```

```
## 10 7723 lone sta~ 605 S Conroe ~ conr~ tx 77304 montgomery FALSE FALSE
## # i 30 more rows
## # i 12 more variables: by_addr <lgl>, match_found <lgl>, within_31_days <lgl>,
## #   flag_missing_date <lgl>, fixed_date_open <date>, max_date <lgl>,
## #   siteid_zip <chr>, name_zip_county <chr>, addr_zip_county <chr>,
## #   bad_zipcode <lgl>, manual_date_change <lgl>, why_NA <chr>
# knitr::purl("texas_merge_try_again.Rmd", output = "texas_merge_setup.R")
```